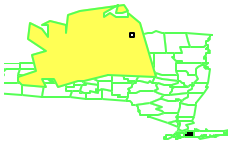
JACKSON STEEL
NEW YORK

EPA REGION 2
CONGRESSIONAL DIST. 04
Nassau County
Mineola/North Hempstead

EPA ID# NYD001344456



Site Description

The Jackson Steel site is an inactive "roll form metal shapes" manufacturing facility located in Mineola/North Hempstead. Jackson Steel operated at the site as early as 1970 and ceased operations in 1991. Degreasers, including tetrachloroethylene (PCE), trichloroethylene (TCE), and 1,1,1-trichloroethane (TCA), were used at the facility until March 1985. Sludges from degreasing equipment were stored in drums. Dumping of wastes into the dry wells, spills, and leaks during the facility's operations and from drums storing various chemicals are the likely sources of the contamination found at the site. During a 1981 inspection of the facility by the Nassau County Department of Health, improper spill control at the waste storage area was noted.

The site is located in a mixed-use area, with commercial and industrial properties located to the south and west and residential properties located to the north and east. Within 4 miles of the site, over 300,000 people obtain drinking water from wells screened in the aquifers that are or could be potentially affected by contamination emanating from the site. The nearest well is located approximately 1,670 feet east-southeast and side-gradient to the site.

Site Responsibility: This site is being addressed through federal actions.

NPL LISTING HISTORY
Proposed Date: 10/22/99
Final Date: 02/04/00

Threats and Contaminants

The analytical results from samples collected in the early 1990s, during privately sponsored investigations, from within, around, and below three on-site the dry wells indicated the presence of PCE, TCE, 1,1,1-TCA, 1,2-dichloroethylene (DCE), and 1,1-dichloroethane (DCA) at depths down to 40 feet below the ground surface. PCE, TCE, 1,1,1-TCA, 1,2-DCE, and 1,1-DCA were also detected in ground water samples collected from monitoring wells located downgradient of the dry wells. Direct contact with or ingestion of contaminated ground water may pose a health threat. There is minimal potential for exposure to contaminated on-site surface soils (if they exist). Except for a thin strip of land (only a few feet wide) situated between the building and a fence which borders the parking lot of an apartment building, the site is either covered by the building or a parking lot.

Cleanup Approach

The site is being addressed in two stages: immediate actions and long-term remedial phases focusing on identification and remediation of the source of contamination.

Response Action Status

Immediate Actions: Following commencement of field work in October 2001, because of concerns about the proximity of the site to a daycare center, at the request of a parent, the Nassau County Health Department performed air sampling inside the building. The air samples detected PCE at levels below the Health Department's guideline for indoor PCE exposure. The levels were also within EPA's acceptable cancer and non-cancer risk ranges. Given the sensitivity of the population exposed (preschool children), the Health Department collected additional samples in mid-December 2001. At that time, indoor testing was also conducted inside the Jackson Steel building and a restaurant located adjacent to the site. The results, which were received in mid-January 2002, indicated that PCE levels in the indoor air of several rooms in the daycare facility were above the Health Department's guideline for indoor PCE exposure. In addition, the maximum level exceeded EPA's acceptable non-cancer risk level. Low levels of PCE were detected in the air samples from the Jackson Steel building and the restaurant. After receiving the daycare center's results, EPA's emergency response team installed a vacuum extraction system under the concrete slab of the building to prevent any contaminants from entering the building in case the soil and ground water under the building are the source. In addition, in order to provide fresh air circulation in the building, a ventilation system was installed by the daycare center's contractor. Samples taken to assess the effectiveness of the above measures showed that the PCE levels in the air were significantly below the New York State Health Department guideline and below EPA's acceptable non-cancer risk levels. The daycare center closed in April 2002.

Because elevated PCE levels were detected in a billiards club which shares common walls with the Jackson Steel site building and the former daycare facility, EPA installed a vacuum extraction system under the concrete slab. Also, a ventilation system was installed.

EPA conducted an investigation in an attempt to determine the source of the PCE in the former daycare center. The investigation included the collection of deep soil samples from the parking lot located between the Jackson Steel site and the former daycare center, soil gas samples at numerous locations outside and inside the former daycare building, and several rounds of indoor air sampling at the former daycare center and nearby business and residential buildings. The investigation was completed in May 2003. The data indicate that the PCE and TCE detected in the indoor air of the former daycare center could be, at least partly, attributed to vapor intrusion from the soil underneath the building. In addition, the PCE and TCE detected underneath and inside the former daycare center building could not be linked to the known sources of contamination at the Jackson Steel site.

Entire Site: A remedial investigation/feasibility study (RI/FS) to determine the nature and extent of contamination at and emanating from the site and to identify and evaluate remedial alternatives is presently underway. The RI commenced in October 2001and was completed in June 2003. The FS was completed in March 2004. A Proposed Plan, which describes the remedial alternatives considered for the contaminated soil, soil vapor, and groundwater at the site and identifies the preferred remedy with the rationale for this preference, was released to the public on July 22, 2004. It is anticipated that a remedy will be selected for the site in early Fall 2004.

Site Facts: EPA initiated a search for potentially responsible parties in January 2000; the effort is still underway.

Cleanup Progress

(Proposed Remedy Under Review by Public)

The vacuum extraction systems under the concrete slab of the former daycare and billiards club buildings continue to treat the subsurface volatile organic compounds.

Field work related to the RI/FS was completed in June 2003. The public is currently reviewing the Proposed Plan for the site.

Site Repositories

Town of North Hempstead, 200 Plandome Road, Manhasset, NY 11030

Garden City Public Library, 60 Seventh Street, Garden City, NY 10550

Mineola Village Clerk's Office, 155 Washington Avenue, Mineola, NY 11501

EPA Region II Superfund Records Center, 290 Broadway, 18th Floor, New York, NY 10007-1866